ST 06-0013-PLR 07/19/2006 MANUFACTURING MACHINERY & EQUIPMENT

The manufacturing machinery and equipment exemption does not apply to machinery or equipment used primarily in pre-production or post-production activities. See 86 Ill. Adm. Code 130.330. (This is a PLR.)

July 19, 2006

Dear Xxxxx:

This letter is in response to your letter dated September 29, 2005, in which you request information. The Department issues two types of letter rulings. Private Letter Rulings ("PLRs") are issued by the Department in response to specific taxpayer inquiries concerning the application of a tax statute or rule to a particular fact situation. A PLR is binding on the Department, but only as to the taxpayer who is the subject of the request for ruling and only to the extent the facts recited in the PLR are correct and complete. Persons seeking PLRs must comply with the procedures for PLRs found in the Department's regulations at 2 Ill. Adm. Code 1200.110. The purpose of a General Information Letter ("GIL") is to direct taxpayers to Department regulations or other sources of information regarding the topic about which they have inquired. A GIL is not a statement of Department policy and is not binding on the Department. See 2 Ill. Adm. Code 1200.120. You may access our website at www.tax.illinois.gov to review regulations, letter rulings and other types of information relevant to your inquiry.

Review of your request disclosed that all the information described in paragraphs 1 through 8 of Section 1200.110 appears to be contained in your request. This Private Letter Ruling will bind the Department only with respect to ABC for the issue or issues presented in this ruling, and is subject to the provisions of subsection (e) of Section 1200.110 governing expiration of Private Letter Rulings. Issuance of this ruling is conditioned upon the understanding that neither ABC nor a related taxpayer is currently under audit or involved in litigation concerning the issues that are the subject of this ruling request. In your letter you have stated and made inquiry as follows:

> I request a private letter ruling for ABC of CITY, Illinois. My power of attorney is attached. This matter is not under audit or in litigation. The Department has not previously ruled on the same or a similar issue nor has a similar ruling request been submitted but withdrawn prior to the issuance of a ruling. I am unaware of any authority contrary to the position stated in this request.
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> ABC manufactures cement. I request a ruling that the Cambelt Reclaimer and associated conveyor system described below qualify for the manufacturing machinery and equipment exemption from the Illinois Use Tax.
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> **Statement of Facts**
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> ABC mines limestone at its quarry and hauls it to its factory where it is converted to cement. The manufacturing process is intended to run 24 hours per day, 365 days per

year. Various units in the plant are shut down for maintenance during the year but the process is designed so that cement can be produced while units are inoperable. Many of the manufacturing units are free-standing while others are housed in protective structures; the product moves from one unit to anther [sic] through elevators and conveyors. The units occupy about 20 acres.

The first manufacturing step at the plant is the crushing of the quarry limestone into smaller pieces and the addition of other minerals. The mixture is then ground into a fine powder known as 'kiln feed.' The kiln feed is then introduced into the 'pyro-process' system where chemical reactions occur to convert the kiln feed into a rock like [sic] material known as clinker.

The heating process entails the use of a preheater unit to raise the temperature of the kiln feed from the ambient temperature to about 1800° Fahrenheit and facilitate the reaction that takes place in the next manufacturing unit, the rotary kiln. After passing through the preheater unit, the kiln feed falls into the rotary kiln. The rotary kiln is a cylindrical furnace that is slightly inclined at the end that connects to the preheater unit. It consists of a slowly rotating steel cylinder approximately 15 feet in diameter and 175 feet long. The kiln feed moves down the cylinder toward a burner. The burner is an intense flame: at the head of the rotary kiln, the temperature is about 2800° F. As the kiln feed moves through the rotary kiln, the gradual increase in temperature effects a chemical change that transforms the powdery kiln feed into the rocklike material known as 'clinker.'

The clinker exits the rotary kiln and is cooled through the use of ambient air. The clinker is then introduced into one of the two cement milling machines at the plant. The cement milling machine consists of a large rotating cylinder containing many heavy steel spheres. The clinker, together with another mineral, is fed into the rotating cylinder. As the milling machine rotates rapidly, the agitation of the steel spheres crushes the clinker into the fine powder known as cement. The two milling machines run continuously throughout the year. When one machine is shut down for maintenance, the other keeps producing cement. When the rotary kiln is shut down for its repairs, the cement milling machines continue operating with clinker produced before the rotary kiln is shut down.

After the clinker has been milled by the cement milling machine, the powdery cement is continuously transported by pneumatic conveying systems to a containment structure. The containment structure is needed to maintain the cement in powdered form until it is transferred to ABC's customers. If the cement were exposed to the open air many adverse environmental and quality problems would develop. The product's ability to meet quality specifications would be ruined if the material were to be exposed to rain, snow, or high levels of humidity. Wind would blow the fine powder material into the atmosphere and it would simply dissipate with a resulting economic loss and a concomitant environmental issue from the particulate entering the atmosphere.

Unlike some cement manufacturers, ABC does not sell bagged cement. Instead, it sells cement in bulk by depositing it directly into specially designed bulk cement carrier trucks. Until the construction of the containment dome described below, the cement has been moved from the cement milling machines to a silo shaped structure. The cement entered the top of the structure. The bottom of the structure had room sufficient to allow the entry of a bulk cement carrier truck. The truck was filled through an opening at the bottom of the structure which allowed a quantity of cement to fall by gravity into the

opening at the top of the truck. No equipment was needed to empty the containment structure.

The use of the silo structure carries with it a problem that results in potential losses of the manufactured product. The containment structure's reliance on gravity for discharge allows the development of a condition in the cement known as ‘pack set.’ The sheer weight of the thousands of tons of cement in the structure can force all the air from the mass. When this condition develops, the cement can harden into a mass of material that is very difficult to reclaim and in some cases is unusable. The pack set cement will not flow to the bottom of the structure and must be removed from the containment structure by manual methods or through the use of small explosive charges.

ABC is installing a new containment structure. The structure is a concrete dome that is approximately 100 feet high and 190 feet in diameter. The dome will allow ABC to improve the protection afforded to the cement by affording better moisture control. It will also allow the production of more cement by increasing the quantity that can be produced and protected between arrivals of the cement container trucks and during off-peak sales periods. It will completely eliminate the loss of plant capacity caused by the onset of pack set.

Cement from the cement milling machine will be conveyed to the top of the dome and fall to the bottom. When filled, the dome will hold about 80,000 tons of cement. The cement will be removed from the dome through the process described below and moved via a conveyor system that runs through a tunnel under the floor of the dome to a storage bin. The storage bin holds up to 300 tons of cement. Customer trucks are loaded from the material in the bin.

The containment dome will be emptied by the following process. When the dome is completely full, cement will flow to the discharge opening at the bottom center point of the dome. Up to a point, gravity effects the movement because the weight of the cement exerts downward pressure toward the opening in the dome floor and onto the conveyor system which takes it to the storage bin. When the level of cement in the dome has fallen through gravity discharge, there comes a point where the slope of the material remaining in the dome reaches its natural angle of repose. When the material is at the angle of repose, gravity ceases to affect it. The dome will be emptied by the employment of a machine known as a Cambelt Reclaimer. The Cambelt Reclaimer will allow for the complete discharge of all the cement in the dome and for the complete recovery of any pack set material.

The Cambelt Reclaimer consists of a rotating arm, about 90 feet long, attached to a column that extends from the ground to the top of the containment dome. Photographs of the containment dome and of the Cambelt Reclaimer, together with a schematic drawing of the Cambelt Reclaimer are attached. The rotating arm is hinged at its bottom. When it is employed, the top of the arm is moved away from the supporting column and lowered onto the pile of cement. A screw mechanism that runs the length of the arm agitates the cement to drive the material towards the center discharge opening. As the level of the pile becomes lower, the Reclaimer's arm continues to be lowered to remain in contact with the cement. The Reclaimer's arm can rotate completely around the dome to empty it of cement.

Ruling Requested

I request your determination that the Cambelt Reclaimer and the associated conveyor system qualifies for the manufacturing machinery and equipment exemption contained in 35 ILCS 105/3-5(18).

The relevant portions of the implementing regulation, 86 Ill. Admin. Code § 130.330, provide as follows:

> (b)(2) The manufacturing process is the production of any article of tangible personal property, whether such article is a finished product or an article for use in the process of manufacturing or assembling a different article of tangible personal property, by procedures commonly regarded as manufacturing, processing, fabricating or refining which changes some existing material or materials into a material with a different form, use or name. These changes must result from the process in question and be substantial and significant.
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> d) Primary Use.
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> 1) The law requires that machinery and equipment be used primarily in manufacturing or assembling. Therefore, machinery which is used primarily in an exempt process and partially in a nonexempt manner would qualify for exemption. However, the purchaser must be able to establish through adequate records that the machinery or equipment is used over 50 percent in an exempt manner in order to claim the deduction.
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> 2) The fact that particular machinery or equipment may be considered essential to the conduct of the business of manufacturing or assembling because its use is required by law or practical necessity does not, of itself, mean that machinery or equipment is used primarily in manufacturing or assembling.
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> 3) By way of illustration and not limitation, the following activities will generally be considered to constitute an exempt use:
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> A) The use of machinery or equipment to effect a direct and immediate physical change upon the tangible personal property to be sold;
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> E) The use of machinery or equipment to place the tangible personal property to be sold into the container, package, or wrapping in which such property is normally sold where such machinery or equipment is used as a part of an integrated manufacturing process;
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> 4) By way of illustration and not limitation, the following activities will generally not be considered to be manufacturing:

D) The use of machinery or equipment to store, convey, handle or transport finished articles of tangible personal property to be sold or leased after completion of the production cycle;

The Department of Revenue has determined that the use of freezers to maintain frozen food and ice in its frozen condition is part of the manufacturing process.

In the production of frozen food, the Department has determined that machinery or equipment used to prepare and store the food in its frozen state is within the production cycle. Accordingly, spiral and deep freezers used to freeze and maintain the product in a frozen condition can qualify for the exemption.

ST 01-0192 (September 24, 2000).

Discussion

The Cambelt Reclaimer qualifies for the manufacturing machinery and equipment exemption. The production of cement is a manufacturing process because it changes various minerals into a material with a different form, use and name. Containment of the cement is an essential part of the manufacturing process.[1] The manufacturing process operates continuously so that there is a constant stream of cement coming from the cement milling machines. That cement is a fine powder that must be constantly contained. It cannot simply be placed in piles outside the cement milling machines because it would immediately dissipate into the air and/or become contaminated with snow, water or high humidity. Once the containment dome is in place, the Cambelt Reclaimer and the associated conveyor will be the only means by which the bulk of the factory's output can be discharged from the plant. Additionally, the Cambelt Reclaimer will increase the amount of cement available for sale by eliminating any losses from pack set. The integrated manufacturing process does not end until the cement has been placed into the 300 ton storage bin at the end of the conveyor leading from the dome. The metering and loading equipment used in filling the bulk cement carriers from the storage bin is not exempt.

The containment dome and the Cambelt Reclaimer play the same role in cement manufacturing as the freezer does in food or ice manufacturing. The freezer is needed to keep the product from spoiling or the ice from melting after the raw materials have been transformed into the end product. The freezer is not simply storage but protects the manufactured product from destruction until it can be shipped. The containment dome provides the same function for the cement by preventing its dissipation into the atmosphere and protecting it from the elements.

The Cambelt Reclaimer and the associated conveyor constitute tangible personal property that is essential to the manufacturer's ability to recover all of the product from the dome and make it available for sale. Without this machinery, it would be impossible to remove all the manufactured product from the factory: gravity alone will not allow the cement to exit the dome and it is not feasible for laborers to work inside the dome. There is no way to move persons or equipment, like front-end loaders, into the dome. The extreme levels of dust, the instability of the cement and the dome's immense size preclude the use of any method of removal other than the Cambelt Reclaimer.

[1] The containment dome itself is not tangible personal property. The exemption is sought only for the machinery and equipment inside the dome and the conveyor leading from the dome to the storage bin.

Moreover, in the case of a manufacturer that sells cement in individual bags, the equipment used to place the cement into the bags is part of the manufacturing process because it is used 'to place the tangible personal property to be sold into the container, package, or wrapping in which such property is normally sold…' 86 Ill. Admin. Code § 130.330(d)(3)(E). The equipment used to handle the cement prior to its introduction to the bagging machinery would thus also be part of the manufacturing process. Accordingly, if the containment dome were employed to maintain cement prior to its bagging, the equipment in the dome would be exempt. Equipment used to handle the bagged cement and load it onto trucks or railcars would not qualify for the exemption. The bagged cement is the plant's end product and under 86 Ill. Admin. Code § 130.330(d)(4)(D), the use of machinery and equipment to handle finished articles of tangible personal property is not exempt.

Where the end product is bulk – not bagged – cement, the manufacturing process does not end until the product has been made ready for delivery to the customer. The bulk cement reaches that point when it has been placed into the 300 ton storage bin from which it is loaded directly into the bulk cement carrier trucks. At that point, it has left the protection afforded by the containment dome and is ready for delivery to the customer. The 300 ton storage bin and the equipment used to load the trucks is analogous to the equipment used to load bagged cement and is not exempt.

Conclusion

I appreciate your consideration of this request. In the event that you are not inclined to agree with the reasoning or conclusion suggested, could you please contact me prior to issuing your response?

DEPARTMENT'S RESPONSE:

The Department has completed its review the documentation submitted in support of your Private Letter Ruling request. It is the position of the Department that the Cambelt Reclaimer and the associated conveyor system do not qualify for the manufacturing machinery and equipment exemption.

Machinery and equipment that is used primarily in the manufacturing or assembling of tangible personal property for wholesale or retail sale or lease is exempt from Retailers' Occupation Tax. See 86 Ill. Adm. Code 130.330. As you have noted, certain activities subsequent to quarrying such as crushing, grinding into "kiln feed," sizing, and blending will constitute a qualifying use of the machinery and equipment used in those activities. See 86 Ill. Adm. Code 130.330(b)(4).

However, the manufacturing machinery and equipment exemption does not apply to machinery or equipment used primarily in pre-production activities. Loaders, conveyors, and transport vehicles that are used primarily to transport rock or other materials from an extraction site to other locations where crushing or sizing etc. occurs do not qualify for the manufacturing machinery and equipment exemption. Machinery or equipment used primarily to store, convey, handle, or transport materials or parts or sub-assemblies prior to their entrance into the production cycle do not qualify for the manufacturing machinery and equipment exemption. See part (4)(C) of subsection (d) of Section 130.330.

In addition, the manufacturing machinery and equipment exemption does not apply to machinery or equipment used primarily in post-production activities. Machinery and equipment used primarily to store, convey, handle, or transport finished articles of tangible personal property to be sold or leased after the production cycle do not qualify for the manufacturing machinery and equipment exemption. Machinery and equipment, such as loaders, conveyors, and transport vehicles used primarily to move finished (crushed, sized, or blended etc.) rock do not qualify for the manufacturing machinery and equipment exemption.

As noted in Section 130.330(b)(2): "[t]he manufacturing process is the production of any article of tangible personal property, whether such article is a finished product or an article for use in the process of manufacturing or assembling a different article of tangible personal property, by procedures commonly regarded as manufacturing, processing, fabricating or refining *which changes some existing material or materials into a material with a different form, use or name. These changes must result from the process in question and be substantial and significant."* (emphasis added).

The existing material ("powdery cement") that is released from the concrete dome remains in the same form, use and name as when the material initially entered the concrete dome, even after use of the Cambelt Reclaimer. Your request does not indicate that the Cambelt Reclaimer or the associated conveyor system changes in any way the existing material into a material with a different form use or name. Therefore, any change that might occur to the existing material is not substantial or significant enough that would enable the Cambelt Reclaimer to qualify for the manufacturing machinery and equipment exemption.

The concrete dome ("containment structure") is used to primarily store the finished article of tangible personal property to be sold between arrivals of cement container trucks at the loading bin and for storage of powdery cement during off-peak sales periods. The Cambelt Reclaimer and the associated conveyor is not used to preserve the cement (such as dehumidifying), but is merely used to transport the cement to another storage bin. The Cambelt Reclaimer and the associated conveyor system is used to transport the powdery cement from the concrete dome to a storage bin and is considered a post-production activity that does not qualify for the manufacturing machinery and equipment exemption.

The factual representations upon which this ruling is based are subject to review by the Department during the course of any audit, investigation, or hearing and this ruling shall bind the Department only if the factual representations recited in this ruling are correct and complete. This Private Letter Ruling is revoked and will cease to bind the Department 10 years after the date of this letter under the provisions of 2 Ill. Adm. Code 1200.110(e) or earlier if there is a pertinent change in statutory law, case law, rules or in the factual representations recited in this ruling.

I hope this information is helpful. If you have further questions concerning this Private Letter ruling, you may contact me at 782-2844. If you have further questions related to the Illinois sales tax laws, please visit our website at www.tax.illinois.gov or contact the Department's Taxpayer Information Division at (217) 782-3336.

Very truly yours,

Edwin E. Boggess
Associate Counsel

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